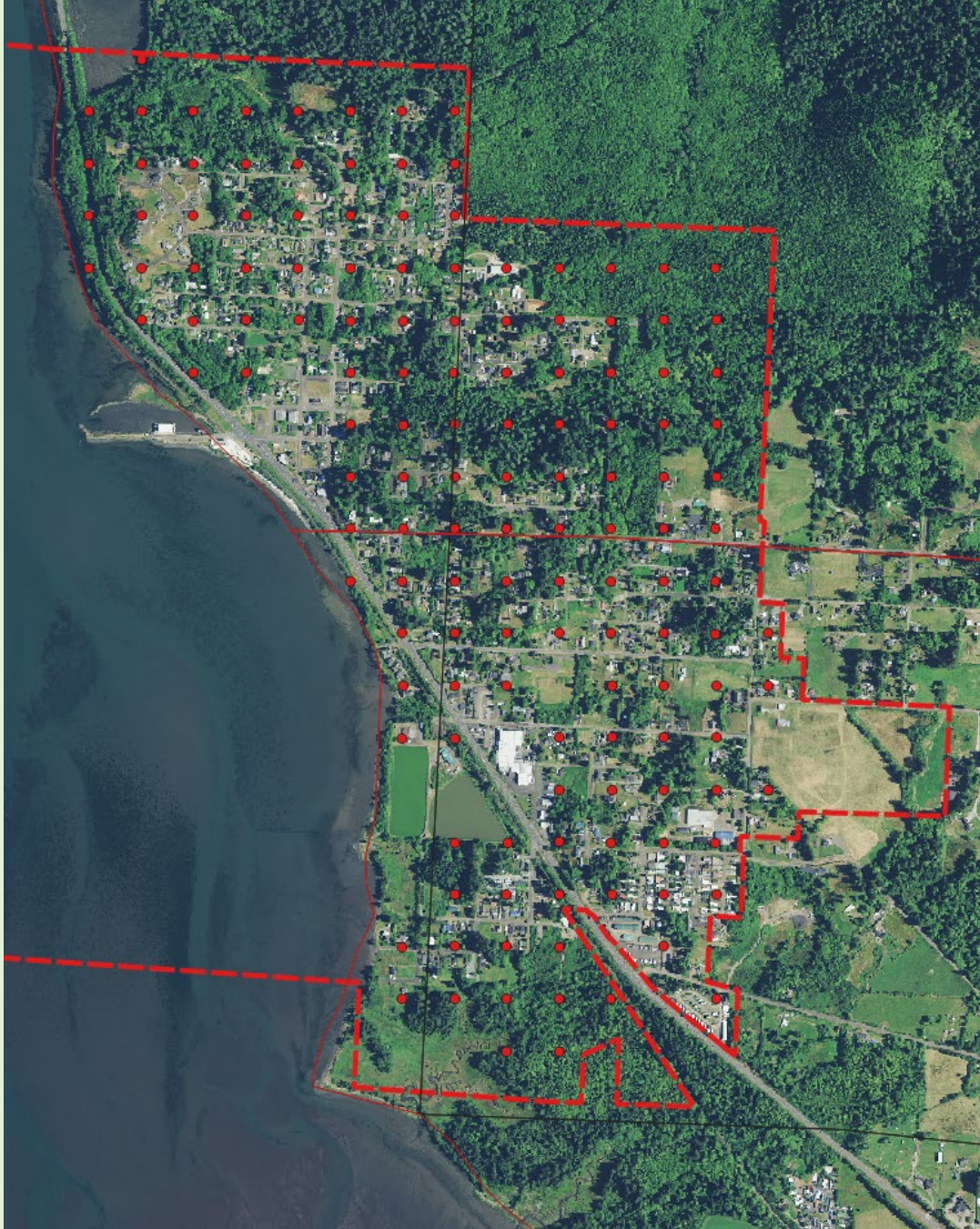




City of Bay City Wildfire Risk Assessment







City of Bay City – Wildfire Risk Assessment Plots

- Plots on about 450' by 450' spacing
- Did not trespass, looked at from street or right-of-way
- Assessed for vegetation, slope and aspect
- Given a flame length thinking about worst fire conditions possible. ie: very dry and windy
- Photo taken at most spots



Windy day on 1/9/2023 similar to what wildfire conditions can be like

Table 1—Relationship of surface fire flame length and fireline intensity to suppression interpretations.

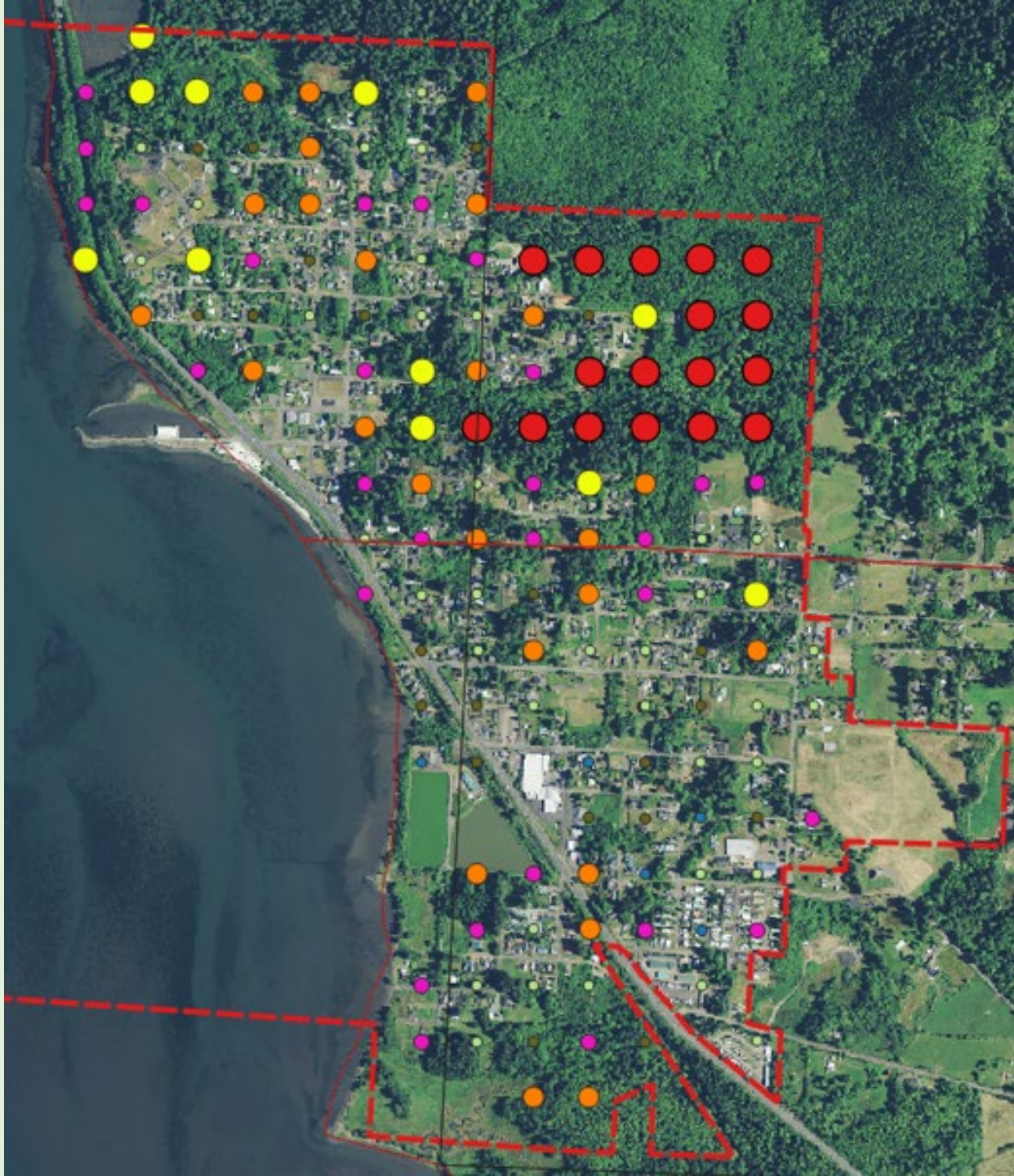
Flame length		Fireline intensity		Interpretation
ft	m	Btu/ft/s	kJ/m/s	
< 4	< 1.2	< 100	<350	 <ul style="list-style-type: none"> • Fires can generally be attacked at the head or flanks by persons using hand tools. • Hand line should hold the fire.
4 – 8	1.2 – 2.4	100 – 500	350 – 1700	 <ul style="list-style-type: none"> • Fires are too intense for direct attack on the head by persons using hand tools. • Hand line cannot be relied on to hold the fire. • Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 – 11	2.4 – 3.4	500 – 1000	1700 – 3500	 <ul style="list-style-type: none"> • Fires may present serious control problems—torching out, crowning, and spotting. • Control efforts at the fire head will probably be ineffective
> 11	> 3.4	> 1000	> 3500	 <ul style="list-style-type: none"> • Crowning, spotting, and major fire runs are probable. • Control efforts at head of fire are ineffective.

Andrews, Patricia L.; Heinsch, Faith Ann; Schelvan, Luke. 2011. **How to generate and interpret fire characteristics charts for surface and crown fire behavior.** Gen. Tech. Rep. RMRS-GTR-253. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 40 p.







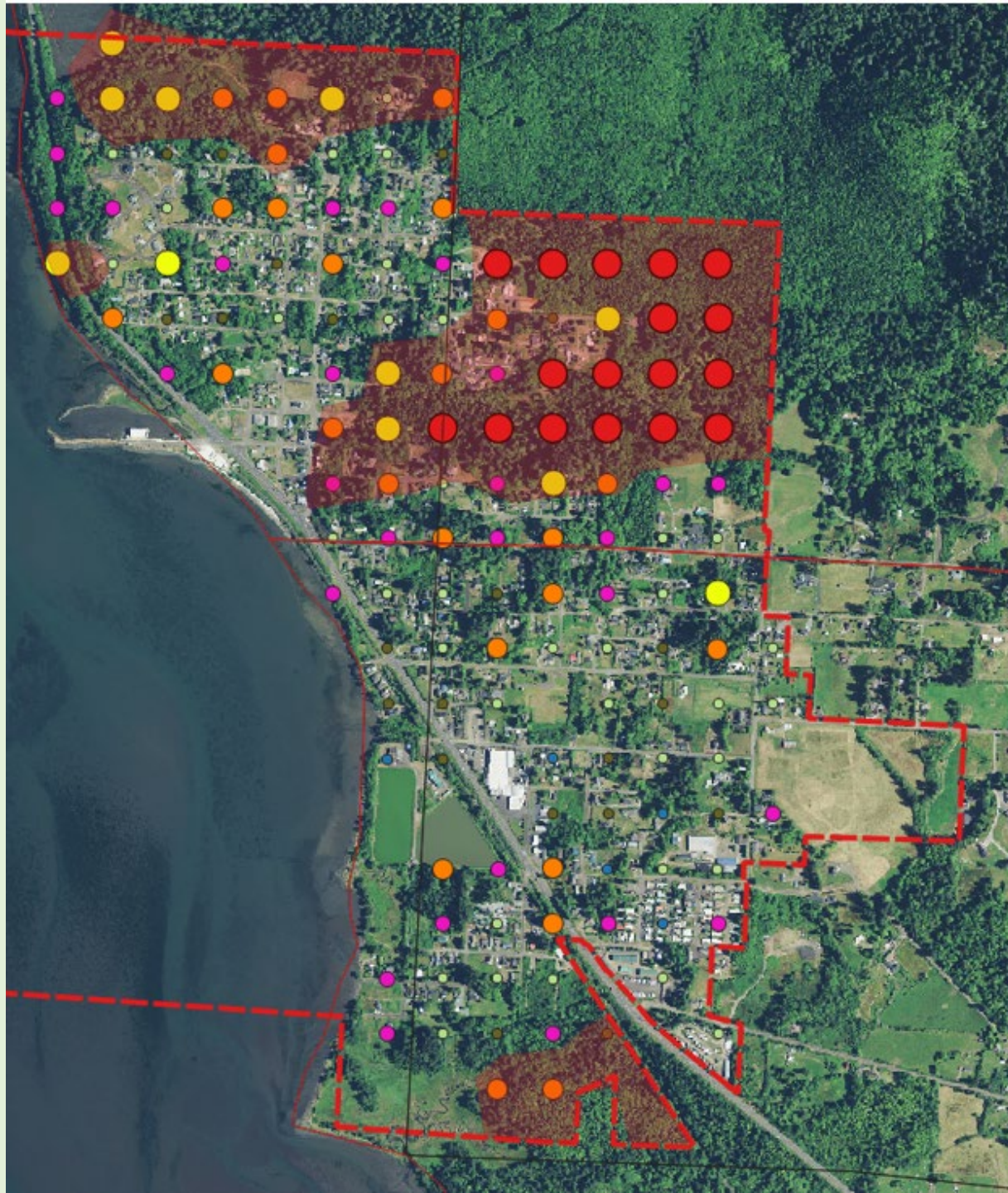


City of Bay City - Wildfire Risk Assessment

Initial data by fire intensity/ flame length

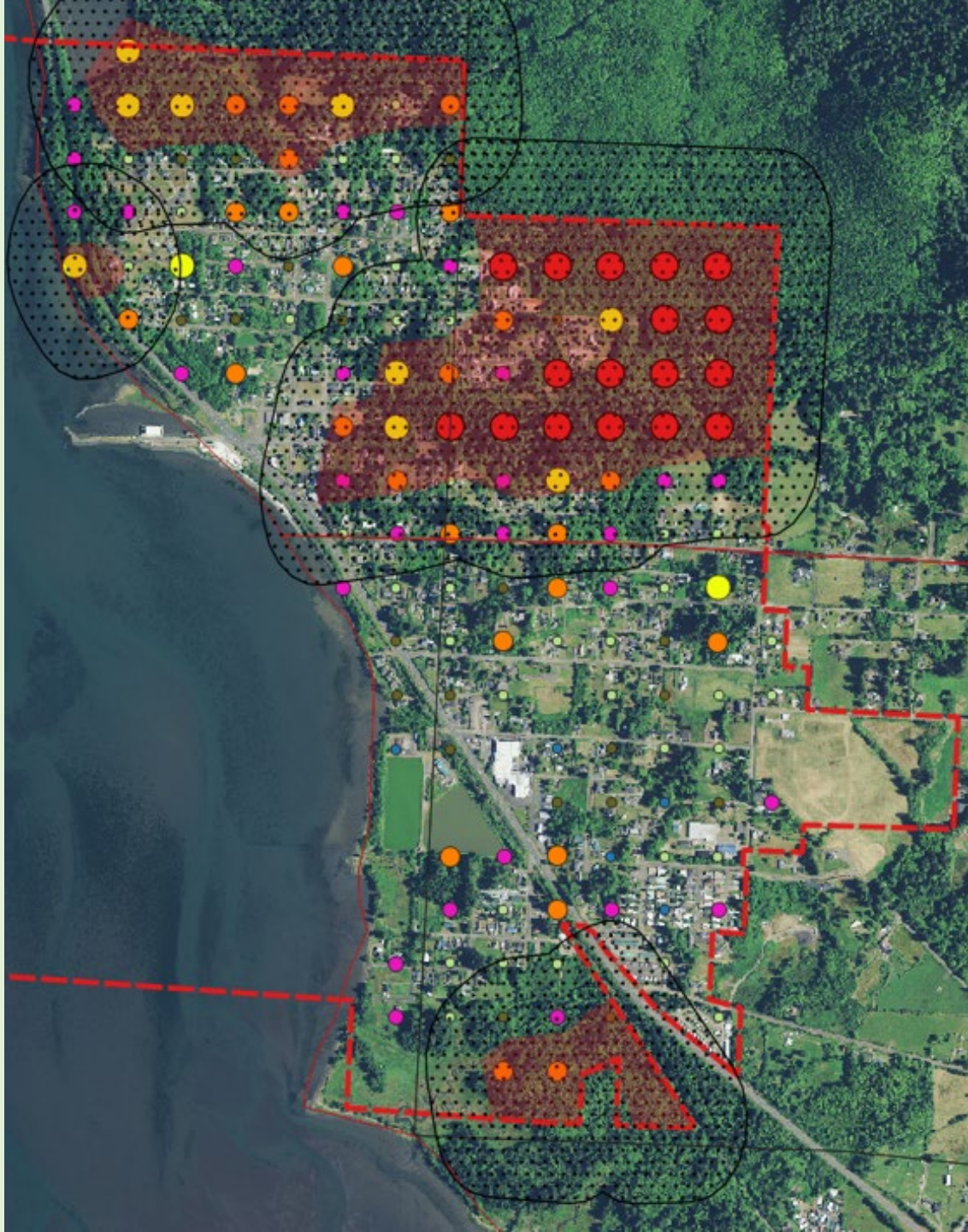
January 16, 2023

Flame length under extreme fire conditions		
Feet	Color	Size
0	Blue	small
0-2	Light green	small
2-4	Brown	small
4-6	Purple	medium
6-8	Orange	medium larger
8-10	Burnt orange	medium larger
10-12	Yellow	less large
12 +	Red	large



Shaded red at higher wildfire risk under extreme fire weather “RED FLAG” conditions

Also need to think about the likelihood of a fire starting. Probably less likely from the Forest, probably more likely from Hwy 101 or other human cause.



Wildfire risk plus 1/8 mile (660 feet)